

Missouri's Proposed 2004/2006 303(d) List

Attached is the proposed 2004/2006 Missouri 303(d) List. Following this list is an explanation of how waters exhibiting higher levels of mercury in fish or low levels of dissolved oxygen in water are being addressed.

Section 303(d) of the federal Clean Water Act requires that each state identify waters that are not meeting water quality standards. The 303(d) list provides a snap shot in time and helps state and federal agencies keep track of waters that do not support all of its designated uses. These waters, because of degraded water quality, do not sustain all of its beneficial uses under state regulation. Water quality standards protect beneficial uses of water such as whole body contact for swimming, maintaining fish and other aquatic life and providing drinking water for people, livestock and wildlife. These water bodies need to be further addressed by a Total Maximum Daily Load (TMDL) study or requirements for pollution controls to characterize the nature and causes of the impairment. Therefore, the 303(d) List is not a complete list of all the impaired waters in the state. Each state must compile a list biennially and submit it to the U.S. Environmental Protection Agency for approval before proceeding with further attention to correct the impairment. Although the state develops the list, the U.S. Environmental Protection Agency (EPA) has the authority to accept, reject or modify the list in any manner. The EPA approved list becomes the final 303(d) List for the state.

In August 2002, shortly after the 2002 Missouri 303(d) List was forwarded to EPA, new state legislation required all subsequent Missouri 303(d) Lists approved by the Clean Water Commission be promulgated as a state rule. The Clean Water Commission then requested the Department of Natural Resources' (the department) Water Protection Program to also promulgate the 303(d) Listing Methodology Document as a state rule. A generalized version of the Listing Methodology Document became a state rule, 10 CSR 20-7.050 General Methodology for Development of Impaired Waterbody List in October 2003. From December 2003 through August 2004, the Water Protection Program conducted a public participation program to revise the more detailed version of the Listing Methodology Document. The Clean Water Commission in September 2004 approved this revised Listing Methodology Document.

EPA issued new guidance for the development of the 2006 303(d) List in July 2005. In light of this new guidance, in March of 2006, the Missouri Clean Water Commission requested the department revise the Listing Methodology Document, and a revised version was approved by the Commission in June 2006. A new state law was also passed in 2006 that removed the requirement for promulgation of the 303(d) List as a state rule.

Summary of the 2004/2006 303(d) List.

There are 82 waters, 77 streams and five lakes, on the proposed 2004/2006 List. Of the 82 waters on the proposed list, 42 have been retained from the 2002 303(d) List. Many of these waters have been modified from the 2002 listing. Modifications could included any of the following: the addition and or deletion of one or more pollutants, a change in the source of the pollutants or a change in the size and location of the impaired segment. The remaining 40 waters are new to the 2004/2006 List.

Table 1. 2004/2006 Proposed Missouri Section 303(d) List

		First Year on	Length/Area o	f	Source	Impaired	Other Designated	Upstream Ei	•	Downstream Impaired Seg		Primary County
Waterbody Name	WBID		Segment	Pollutant		Uses*	Uses*	Latitude	Longitude	Latitude	Longitude	
Bee Fork	2760	2006	1.0 mi.	Lead	Fletcher Mine	AQL	FC, LWW, WBC	37.4410	-91.0960	37.4431	-91.0792	Reynolds
Big Bottom Creek	1746	1998	1.8 mi.	Low D.O.	Lake Forest Subdivision	AQL	FC, LWW	37.9540	-90.2066	37.9745	-90.1997	Ste. Genevieve
Big Creek	444	2006	6.0 mi.	Ammonia, Low D.O.	Bethany WWTP	AQL	FC, LWW, WBC, DWS	40.2542	-94.0636	40.2038	-94.0756	Harrison
		1994	19.0 mi.	Cadmium, Lead, Zinc, Inorganic Sediment				37.8721	-90.5885	37.9329	-90.5123	
		1994	16.0 mi.	Cadmium, Lead, Inorganic Sediment			FC, LWW,	37.9329	-90.5123	38.0078	-90.6282	
		1994	3.0 mi.	Lead,	1	AQL	WBC, IND	38.0078	-90.6282	38.0364	-90.6196	St. Francois
Big River	2080	1994	17.0 mi.	Inorganic Sediment	Old Lead Belt AML	AQL, FC	LWW, WBC, IND	38.0364	-90.6196	38.1569	-90.7022	Jefferson
Blue River	417	2006	4.0 mi.	Bacteria	Urban Runoff	WBC	FC, AQL, LWW, IND	39.0694	-94.5071	39.1228	-94.4658	Jackson
Blue River	418	2006	9.0 mi.	Bacteria	Urban Runoff	WBC	FC, AQL, LWW, SCR, IND	39.0156	-94.5208	39.0694	-94.5071	Jackson
Blue River	419	2006	9.0 mi.	Bacteria	Urban Runoff	WBC	FC, AQL, LWW, SCR	38.9526	-94.5633	39.0156	-94.5208	Jackson
Bobs Creek	35	2006	1.0 mi.	Low D.O.	Lincoln Co. PWSD #1 WWTP	AQL	FC, LWW, WBC	38.9860	-90.8701	38.9799	-90.8541	Lincoln
Brush Creek	1371	2002	4.0 mi.	Low D.O.	Humansville WWTP	AQL	FC, LWW, WBC	37.7913	-93.5901	37.8316	-93.6277	Polk
Buffalo Ditch	3118	1994	3.0 mi.	Ammonia, Low D.O.	Kennett WWTP	AQL	FC, LWW, WBC	36.2001	-90.0614	36.1609	-90.0826	Dunklin
Cave Spring Br.	3245U	1998	0.2	Nutrients	Simmons Ind.	GC		36.5468	-94.6094	36.5475	-94.6178	McDonald
Center Creek	3203	1994	12.8 mi.	Cadmium, Lead, Zinc	Tri-State AML	AQL	FC, LWW, WBC, SCR, IRR, IND	37.1754	-94.4550	37.1510	-94.6170	Jasper
Chariton River	640	2006	20.0 mi.	Bacteria	Unknown	WBC	FC, AQL, LWW, SCR, IRR	39.6819	-92.6928	39.4428	-92.8784	Chariton
Clear Creek	3239	2006	3.0 mi.	Low D.O.	Monett WWTP	AQL	FC, LWW, WBC	36.9174	-93.9470	36.9423	-94.0002	Lawrence

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		First Year on	Length/Area of	f		Impaired	Other Designated	Upstream Endpoint of Impaired Segment		Downstream Endpoint of Impaired Segment		Primary
Waterbody Name	WBID	303(d)	Segment	Pollutant	Source	Uses*	Uses*	Latitude	Longitude	Latitude	Longitude	County
Coldwater Creek	1706	2006	5.5 mi.	Chloride, Bacteria	Urban Runoff	AQL, WBC	FC, LWW, IND	38.8133	-90.2908	38.8318	-90.2188	St. Louis
Courtois Creek	1943	2006	3.0 mi.	Lead, Zinc	Viburnum Mine Tailings	AQL	FC, LWW, WBC, SCR	37.7648	-91.0718	37.7989	-91.0589	Washington
Creve Coeur Creek	1703	2006	2.0 mi.	Chloride, Bacteria	Urban Runoff	AQL, WBC	FC, LWW	38.6701	-90.4927	38.6959	-90.4945	St. Louis
Crooked Creek	1928	2006	3.5 mi.	Cadmium, Lead	Buick Smelter/ Casteel Mine	AQL	FC, LWW, WBC	37.6929	-91.1593	37.7133	-91.2048	Crawford
Dardenne Creek	221	2006	1.0 mi.	Inorganic Sediment	Unknown	AQL	FC, LWW, WBC, SCR	38.7361	-90.7854	38.7366	-90.7699	St. Charles
Dardenne Creek	222	2006	3.4 mi.	Inorganic Sediment	Unknown	AQL	FC, LWW, WBC, SCR	38.7388	-90.8301	38.7361	-90.7854	St. Charles
Douger Branch	3168	2006	2.5 mi.	Cadmium, Lead	Aurora AML	AQL	FC, LWW, WBC	36.9751	-93.7139	36.9775	-93.7798	Lawrence
Dousinbury Creek	1180	2006	3.5 mi.	Bacteria	Unknown	WBC	AQL, FC, LWW	37.5731	-92.9276	37.5952	-92.9801	Dallas
Dry Auglaize Creek	1145	2002	3.0 mi.	Unknown	Unknown	AQL	FC, LWW, WBC	37.7049	-92.6505	37.7408	-92.6220	Laclede
			0.6 mi.	Low D.O.				37.9320	-91.7262	37.9317	-91.7169	
Dutro Carter Creek	3569	2006	0.1 mi.	Ammonia	Rolla Southeast WWTP	AQL	FC, LWW,WBC	37.9320	-91.7262	37.9318	-91.7245	Phelps
East Fork Chariton River	682	2006	48.5 mi.	Sulfate	Multiple AMLs	AQL	FC, LWW, WBC, DWS, IRR	39.7509	-92.5158	39.3403	-92.8445	Randolph
East Fork Grand River	457	2006	25.0 mi.	Bacteria	Unknown	WBC	FC, AQL, LWW, DWS, IRR	40.4943	-94.3123	40.1977	-94.3620	Gentry
E. Fk. Locust Creek	608		2.5 mi.	Low D.O.	Milan WWTP	AQL	FC, LWW	40.1936	-93.1139	40.1664	-93.1190	,
E. Fk. Tebo Creek	1282		1.0 mi.	Low D.O.	Windsor Southwest Lagoon	AQL	FC, LWW, WBC	38.5142	-93.5346		-93.5297	
Eaton Branch	2166	2006	0.9 mi.	Cadmium, Lead, Zinc	Leadwood Tailings Pile	AQL	FC, LWW, WBC	37.8675	-90.6057	37.8721	-90.5885	St. Francois
Fellows Lake	7237	2006	820 ac.	Nutrients	Suburban and Rural NPS	GC	AQL, LWW, WBC, SCR, DWS	37.3097	-93.1790	37.3155	-93.2294	Greene
Fishpot Creek	2186	2006	2.0 mi.	Bacteria	Urban Runoff	WBC	FC, LWW,AQL	38.5538	-90.5095	38.5471	-90.4968	St. Louis
Flat Creek	865	2006	15.5 mi.	Unknown	Unknown	AQL	FC, LWW, WBC, SCR	38.5436	-93.4116	38.6588	-93.2537	Pettis

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Waterbody Name		First Year on	Length/Area of Impaired Segment	f Pollutant		Impaired Uses*	Other Designated Uses*	Upstream Ei	•	Downstream Endpoint of Impaired Segment		Primary
	WBID	303(d)						Latitude	Longitude	Latitude	Longitude	County
			1.0 mi.	Cadmium, Lead, Zinc,		AQL	FC, LWW, WBC	37.8372	-90.5301	37.8481	-90.5175	
Flat River Creek	2168	1994	4.0 mi.	Inorganic Sediment	Old Lead Belt AML	AQL, FC	LWW, WBC	37.8481	-90.5175	37.8918	-90.4999	St. Francois
		2006	0.8 mi.	Ammonia, Low D.O.				38.4377	-93.0000	38.4477	-93.0041	
Gabriel Creek	883	1994	1.2 mi.	Low D.O.	Stover WWTPs	AQL	FC, LWW	38.4477	-93.0041	38.4641	-93.0033	Morgan
Grand Glaize Creek	2184	2006	4.0 mi.	Chloride, Bacteria	Urban Runoff	AQL, WBC	FC, LWW	38.5713	-90.4698	38.5525	-90.4636	St. Louis
Grand River	593	2006	60.0 mi.	Bacteria	Unknown	WBC	AQL, FC, LWW, SCR, DWS, IRR	39.7410	-93.5352	39.3844	-93.1071	Chariton
Gravois Creek	1712		2.0 mi.	Bacteria	Urban Runoff	WBC	AQL, FC, LWW		-90.2985			St. Louis
Gravois Creek	1713	2006	4.0 mi.	Chloride, Bacteria	Urban Runoff	AQL, WBC	FC, LWW	38.5467	-90.3480	38.5407	-90.2985	St. Louis
Grindstone Creek	1009	2006	1.5 mi.	Bacteria	Unknown	WBC	AQL, FC, LWW	38.9224	-92.3034	38.9278	-92.3218	Boone
Hinkson Creek	1007	1998	6.0 mi.	Unknown	Urban Runoff	AQL	FC, LWW, WBC, SCR	38.9278	-92.3375	38.9217	-92.4135	Boone
Hinkson Creek	1008	1998	6.3 mi.	Unknown	Urban Runoff	AQL	FC, LWW, WBC	38.9629	-92.2961	38.9278	-92.3375	Boone
Indian Creek	420	2002	3.0 mi.	Bacteria	WWTP in Kansas, Urban Runoff	WBC	AQL, FC, LWW, IND	38.9384	-94.6085	38.9526	-94.5633	Jackson
Indian Creek	1946	2002	1.5 mi.	Lead, Zinc	Viburnum Mine Tailings	AQL	FC, LWW, WBC	37.7413	-91.0847	37.7648	-91.0718	Washington
Indian Creek, Tributary to	3663	2006	0.5 mi.	Lead, Zinc	Viburnum Mine Tailings	AQL	FC, LWW, WBC	37.7559	-91.0946	37.7596	-91.0748	Washington
Joyce Creek	3233	2006	5.0 mi.	Bacteria	Unknown	WBC	AQL, FC, LWW	36.7983	-93.9589	36.8031	-94.0330	Barry
Lake Taneycomo	7314	1994	865.0 ac.	Low D.O.	Table Rock Dam	AQL	FC, LWW, WBC, SCR, DWS	36.5957	-93.3091	36.6592	-93.1244	Taney
,							AQL, FC, LWW, SCR,					
Lamine River	847	2006	54.0 mi.	Bacteria	Unknown	WBC	IRR	38.6683	-92.953	38.9802	-92.8508	Cooper
Lewistown Lake	7020	2002	29.0 ac.	Atrazine	Crop Production	DWS	AQL, FC, LWW, WBC, SCR	40.0978	-91.8269	40.0978	-91.8190	Lewis

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		303(d)	Segment	Pollutant				Latitude	Longitude	Latitude	Longitude	County
Little Dry Fork	1863	2006	1.0 mi.	Low D.O.	Rolla Southeast WWTP	AQL	FC, LWW, WBC	37.9318	-91.7170	37.9393	-91.7060	Phelps
ittle Muddy Creek, Fributary to	3490	1998	0.4 mi.	Color, Chloride	Tyson Foods	AQL, GC**	FC, LWW, WBC	38.7680	-93.3021	38.7731	-93.2912	Pettis
	0400	1000	2.0 mi.	00	Unknown	rige, co		37.2939	-93.3149		-93.3426	
			2.0 mi.		Springfield Northwest WWTP			37.2880	-93.3426	37.2914	-93.3595	Greene
Little Sac River	1381	1998	15.0 mi.	Bacteria	Unknown	WBC	AQL, FC, LWW, SCR	37.3907	-93.4064	37.5262	-93.5396	Polk
Long Branch Creek	696	2006	2.0 mi.	Low D.O.	Atlanta WWTP	AQL	FC, LWW, WBC	39.8979	-92.4934	39.8744	-92.4908	Macon
-			1.0 mi.	Temperature	Stream Modification			36.7348	-90.4131	36.7295	-90.3984	
			6.0 mi.	pH, Ammonia, Temperature	Poplar Bluff WWTP, Stream Modification			36.7295	-90.3984	36.6163	-90.4031	
Main Ditch	2814	2006	7.0 mi.	Temperature	Stream Modification	AQL	LWW, FC, WBC, IRR	36.6163	-90.4031	36.5558	-90.4485	Butler
McKenzie Creek	2786	2002	2.5 mi.	Low D.O.	Piedmont WWTP	AQL	FC, LWW, WBC	37.1389	-90.7070	37.1058	-90.7180	Wayne
Middle Fork Black River	2744	2006	15.0 mi.	Lead	Multiple Mines	FC	AQL, LWW, WBC	37.6363	-91.0027	37.4465	-90.8518	Reynolds
Middle Fork Grand River	468	2006	25.0 mi.	Bacteria	Unknown	WBC	AQL, FC, LWW, SCR, IRR	40.5418	-94.3513	40.2186	-94.3944	Gentry
Mound Br.	1300	1998	1.0 mi.	Low D.O.	Butler WWTP	AQL	LWW, WBC	38.2262	-94.3444	38.217	-94.351	Bates
Muddy Creek	853	2006	1.0 mi.	Color	Tyson Foods	GC**	AQL, FC, LWW, WBC	38.7718	-93.2748	38.7675	-93.2582	Pettis
			29.9	Unknown	Unknown			37.3172	-94.0258	37.4825	-94.2927	
			1.0 mi.	Low D.O., Ammonia	Lamar WWTP			37.4825	-94.2927	37.4790	-94.2786	
North Fork Spring			3.1 mi.	Low D.O.	Lamar WWTP	1	FC, LWW,	37.4790	-94.2786	37.4566	-94.2819	
River	3188	2006	11.5 mi.	Unknown	Unknown	AQL	WBC AQL, FC,	37.4566	-94.2819	37.3406	-94.3312	Barton
Niangua River	1170	2006	2.0 mi.	Bacteria	Unknown	WBC	AQL, FC, LWW, SCR	37.6865	-92.9374	37.6929	-92.9236	Dallas
No Creek	550	2006	22.5 mi.	Bacteria	Unknown	WBC	AQL, FC, LWW	40.1706	-93.4500	39.8891	-93.5716	Grundy

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Waterbody Name		First Year on 303(d)	Length/Area of Impaired		Source	Impaired Uses*	Other Designated	Upstream Ei	•	Downstream Impaired Seg		Primary
			Segment	Pollutant			Uses*	Latitude	Longitude	Latitude	Longitude	County
Osage River	1031		1.0 mi.	Total Dissolved Gases	Bagnell Dam	AQL	FC, LWW, WBC, SCR, IRR	38.2026		38.1915		-
Pearson Creek	2373	2006	1.5 mi.	Bacteria	Unknown	WBC	AQL, FC, LWW	37.1821	-93.1991	37.1637	-93.1965	Greene
Pickle Creek	1755	2006	7.0 mi.	рН	Natural	AQL	FC, LWW, WBC	37.8146	-90.2552	37.8369	-90.2036	Ste. Genevieve
		2006	0.5 mi.	Unknown	Unknown			37.6113	-93.3953	37.6169	-93.3900	
Piper Creek (Town Branch)	1444	1998	2.0 mi.	Organic Sediment	Bolivar WWTP	AQL	FC, LWW, WBC	37.6169	-93.3900	37.6387	-93.3829	Polk
Pogue Creek	3232	2006	2.5 mi.	Bacteria	Unknown	WBC	AQL, FC, LWW	36.7543	-93.9740	36.7637	-94.0153	Barry
River Des Peres	1711	2006	1.0 mi.	Chloride	Urban Runoff	AQL	FC, LWW	38.5595	-90.2829	38.5481	-90.2718	St. Louis
Saline Creek, Trib. to	2859U	2006	1.0 mi.	Nickel	Madison Mine	GC**		37.5516	-90.2729	37.5594	-90.2756	Madison
Shaw Branch	2170	1994	2.0 mi.	Cadmium, Lead	Federal AML	AQL	FC, LWW, WBC	37.8332	-90.5173	37.8481	-90.5175	St. Francois
Shoal Creek	3231	2006	4.0 mi.	Bacteria	Unknown	AQL, WBC	FC, LWW	36.6724	-93.9759	36.7281	-94.0124	Barry
South Blackbird Creek	655	2006	4.0 mi.	Ammonia	Unknown	AQL	FC, LWW, WBC	40.4246	-92.9602	40.4139	-92.9050	Putnam
Straight Fork	959		6.0 mi.	Chloride	Versailles WWTP	AQL	FC, LWW, WBC	38.4443	-92.8504	•	-92.8343	
Strother Creek	2751U	2006	1.0 mi.	Zinc	Buick Mine/Mill	GC**		37.5881	-91.0602	37.5948	-91.0471	Reynolds
Table Rock Lake	7313	2002	43100 ac.	Nutrients	Pt/NP Sources	GC	LWW, AQL, WBC,SCR	36.4984	-93.754	36.5961	-93.3138	Stone
Turkey Creek	3216	2002	7.0 mi.	Cadmium, Zinc	Multiple AMLs	AQL	FC, LWW, WBC	37.1058	-94.5025	37.1248	-94.6180	Jasper
			0.8 mi.	Cadmium, Zinc, Lead			FC, LWW,	37.9233	-90.5486	37.9331	-90.5523	
Turkey Creek	3282	2006	1.2 mi.	Lead	Mine Tailings	AQL	WBC	37.9331	-90.5523	37.9490	-90.5592	St. Francois
Village Creek	2863	2006	1.5 mi.	Inorganic Sediment, Manganese, Lead	Mine La Motte AML	AQL	FC, LWW, WBC	37.5988	-90.2541	37.5656		
Wakonda Lake	7002	2006	78.0 ac.	Lead	Unknown	FC	AQL, LWW, WBC, SCR	40.0053	-91.5255	40.0022	-91.5121	Lewis

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		First Year on	Length/Area of Impaired				01	Upstream Endpoint of Impaired Segment		Downstream Endpoint of Impaired Segment		Primary
Waterbody Name	WBID	303(d)	•					Latitude	Longitude	Latitude	Longitude	County
Warm Fork Spring River	2579	2006	9.0 mi.	Bacteria	Unknown	WBC	AQL, FC, LWW, SCR, IRR	36.6003	-91.5482	36.4991	-91.5273	Oregon
Watkins Creek	1708	2006		Chloride, Bacteria	Urban Runoff	AQL, WBC	FC, LWW	38.7696	-90.2213	38.7734	-90.1754	St. Louis
West Fork Medicine Creek	623	2006	40.0 mi.	Unknown	Unknown	AQL	FC, LWW, WBC	40.5794	-93.4292	40.1058	-93.3760	Mercer
Willow Fork, Tributary to	956	2006	0.5 mi.	Low D.O.	Tipton WWTP	AQL	FC, LWW	38.6321	-92.7698	38.6274	-92.7644	Moniteau

^{*}Designated Use Codes: AQL-Protection of Aquatic Life (Warm, Cool, or Cold Water); FC-Fish Consumption; WBC-Whole Body Contact Recreation; SCR-Secondary Contact Recreation; DWS-Drinking Water Supply; IRR-Irrigation; LWW-Livestock & Wildlife Watering; IND-Industrial; AML-Abandoned Mine Land

^{**}General Criteria: Although no specific designated uses have been impaired, the general water quality criteria which apply to all waters of the state [10 CSR 20-7.031 (3)] have been violated, so the water is considered impaired and eligible for the 303(d) list. In the case of unclassified waters, this includes acute toxicity.

Waters with Elevated Levels of Mercury in Fish Fillets

The department's assessment of water quality includes a review of mercury contamination in fish taken from a select group of Missouri's lakes and streams. Sampling by the department, the Missouri Department of Conservation and EPA has resulted in 55 sampling locations in the state where the department has sufficient data to establish confidently mercury levels in fish. Of these 55 sites, 14 sites on 13 water bodies show levels of mercury in fish sufficient to raise health concerns related to regular fish consumption. General observations of the data would indicate that mercury contamination of certain fish may be a state-wide problem. Each year, the Missouri Department of Health and Senior Services issues a statewide advisory on the consumption of fish taken from Missouri's lakes and streams. The advisory provides guidance on appropriate steps to take to safeguard public health from possible mercury poisoning and helps ensure that the public is aware of the potential contamination.

The data on mercury levels in fish are available in an attachment to this 303(d) List. Generally, waters that have mercury levels sufficient to contaminate fish are considered eligible for placement on the 303(d) List. However, listing only the few waters with data available and indicates a problem may create a misconception that only those waters are affected. Likewise, listing all of the state's waters could cause a belief that all waters contain fish unsafe to eat. Neither scenario is likely true. Furthermore, the listing may cause an excessive focus on sources of mercury within Missouri when most of the mercury in fish sampled in this state comes from sources outside of the state via atmospheric deposition. Because of the complexity of the problem, the department is participating in a state mercury taskforce to inventory, track and recommend controls for mercury sources in Missouri. Placing a few or all waters on the 303(d) List may confuse, rather than facilitate, the ongoing efforts to address the broader-based mercury concern. This notice directs the public to all of the information reviewed by the department regarding mercury contamination in fish. It informs the public that the department is addressing the potential health threat created by mercury contamination as a state-wide initiative instead of through a water body-by-water body approach as would be dictated by the limited number of locations where adequate monitoring has occurred.

A total of 13 waters with elevated levels of mercury in fish tissue, seven previously listed in 2002 and six additional waters, were not placed on the 2004/2006 303(d) List for the reason noted above. These waters include: WBID 2034 Bourbeuse River, WBID 7057 Busch Wildlife Area Lake 35, WBID 2636 Current River, WBID 2597 Eleven Point River, WBID 2601 Eleven Point River, WBID 7237 Fellows Lake, WBID 864 Flat Creek (Pettis County), WBID 1455 Gasconade River, WBID 7196 Lake Buteo (Knob Noster State Park Lakes), WBID 7436 Lake of the Woods (Boone County), WBID 7171 Long Branch Lake, WBID 7033 Mark Twain Lake, and WBID 7402 Mozingo Lake.

More information on the health effects from mercury can be obtained from the Missouri Department of Health and Senior Services' Web site at www.dhss.mo.gov/Health/index.html or EPA's Web site at www.epa.gov/waterscience/criteria/methylmercury/merctitl.pdf.

Information on how to access data on mercury levels in fish or dissolved oxygen levels in water in Missouri is available on the department's Web site at www.dnr.mo.gov/env/wpp/proposed-2006-303d-pn.htm.

Dissolved Oxygen

The department's assessment of water quality includes a review of the dissolved oxygen levels within a select number of water bodies. As more data becomes available, the department is recognizing a pattern of lower dissolved oxygen in streams, which may indicate the existence of a natural condition rather than an impairment.

Missouri has a statewide standard for dissolved oxygen of five milligrams per liter (5 mg/L). This standard is an instantaneous minimum, meaning that all waters are expected to maintain at least a five mg/L dissolved oxygen level at all times. The water quality data, combined with the department's understanding of how dissolved oxygen is affected by natural conditions, creates a reasonable likelihood that many of the waters having dissolved oxygen readings below five mg/L are not affected by pollutants, but are instead reflecting the natural conditions of the waters.

A listing of waters that exhibit naturally low dissolved oxygen would create a misconception that these waters are affected by the discharge of pollutants and therefore need pollution restrictions (in the manner of a Total Maximum Daily Load or TMDL) to address water quality. To avoid this misconception and the needless development of a TMDL, the department is providing this explanation in lieu of listing these waters where evidence indicates a natural dissolved oxygen condition. The department is also reevaluating the statewide dissolved oxygen standard and will likely be proposing a revised dissolved oxygen standard (such as an ecoregionally based standard) to reflect the dissolved oxygen levels which occur naturally with Missouri's waters.

A total of 42 waters with low dissolved oxygen levels with no apparent pollutant sources, were not placed on the 2004/2006 303(d) List for the reason stated above. These waters are listed below.

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WBID 1225 Big Otter Creek, Trib. to - Henry Co.
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WBID 3120 Buffalo Ditch, Ditch to - Dunklin Co.

WBID 1865 Burgher Branch - Phelps Co.

WBID 0737 Cedar Creek – Callaway/Boone Co.

WBID 0743 Cedar Creek, Trib. to – Callaway Co.

WBID 1333 Clear Creek - St. Clair Co.

WBID 1336 Clear Creek – Vernon Co.

WBID 0690 Dark Creek – Randolph Co.

WBID 3109 Ditch No. 36 – Dunklin Co.

WBID 1145 Dry Auglaize Creek – Laclede Co.

WBID 3370 Fassnight Creek – Greene Co.

WBID 2186 Fishpot Creek – St. Louis

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WBID 0747 Fowler Creek – Boone Co.
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WBID 3105 Lateral No.2 Main Ditch - Stoddard Co.

WBID 1864 L. Dry Fork – Phelps Co.

WBID 1325 L. Drywood Creek – Vernon Co.

WBID 1438 L. Lindley Creek - Dallas Co.

WBID 1189 L. Niangua River – Hickory Co.

WBID 3652 L. Osage River – Vernon Co.

WBID 1299 Miami Creek- Bates Co.

WBID 1300 Mound Branch – Bates Co.

WBID 0170 N. Fk. Cuivre River – Pike Co.

WBID 1293 Osage River – St. Clair Co.

WBID 1373 Panther Creek – St. Clair Co.

WBID 3577 Sadler Branch – Polk Co.

WBID 3231 Shoal Creek - Barry Co.

WBID 0399 Sni-a-Bar Creek – Jackson Co.

WBID 0142 S. Fk. Salt River- Audrain Co.

WBID 1870 Spring Branch – Dent Co.

WBID 3135 Stevenson Bayou – Mississippi Co.

WBID 0710 Stinson Creek – Callaway Co.

WBID 0959 Straight Fork – Morgan Co.

WBID 0686 Sugar Creek – Randolph Co.

WBID 0073 Troublesome Creek – Marion Co.

WBID 1339 Walnut Creek- Cedar Co.

WBID 1317 W. Fk. Drywood Creek – Vernon Co.

WBID 1175 W. Fk. Niangua River – Webster Co.

WBID 1504 Whetstone Creek – Wright Co.

WBID 0955 Willow Fork – Moniteau Co.

WBID 2375 Wilson's Creek – Greene Co.

WBID 2879 Wolf Creek- St. François Co.

WBID 3589 Wolf Creek, Trib. to – St. Francois Co.

Key to the lists.

The column headings for Tables One and Two and an explanation of them are given below.

Water Body Name – the name of the stream or lake as it appears in 10 CSR 20-7.031 Table H of Missouri's Water Quality Standards.

WBID – Water Body Identification Number, a number unique to each water body listed in Missouri's Water Quality standards

- **Length/Area of Impaired Segment** the size of the impaired area. For streams, the units is miles and for lakes the unit is surface acres.
- **Unit-** (Table Two only)- the units for the Length/Area column. **Mi**= stream miles, **Ac**= surface acres of lakes.
- **Pollutant** the name of the pollutant(s) causing the impairment.
- **Source** the primary source of the pollutant in this water body
- Impaired Uses the beneficial uses recognized for this water in Missouri's Water Quality Standards (Table H) that are impaired. These beneficial uses include: Protection of Aquatic Life (AQL), Fish Consumption by Humans (FC), Swimming and other Whole Body Contract Recreation (WBC), Drinking Water Supply (DWS). In addition to these specifically recognized beneficial uses, all waters of the state are covered by general criteria (GC) that prohibit nuisance conditions caused by unsightly color, odor, suspend material or bottom deposits or other conditions that would be harmful to aquatic life.
- Other Designated Uses- The unimpaired beneficial uses that are recognized for that water body in Table H, Missouri's Water Quality Standards. In addition to the uses described above, this column may include beneficial uses such as Livestock and Wildlife Watering (LWW), Industrial Water Supply (IND), Secondary Contact Recreation (SCR) which includes such activities as fishing, wading, commercial and recreational boating and other activities where there is incidental contact with the water, and agricultural irrigation (IRR).
- **Upstream and Downstream Endpoints of the Impaired Segment** the four columns give the latitude and longitude of the upstream and downstream ends of the impaired segment in decimal degrees.
- **Primary County** the county that contains all or the largest percent of the impaired segment.
- **Reason for Delisting** The reason the water does not appear on the proposed 2004/2006 List.